

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/736,137 Confirmation No. : 3692
Applicant : Thomas E. Creamer
Filed : December 15, 2003
TC/A.U. : 2609
Examiner : Patel, Jatin K.
Docket No. : BOC9-2003-0093 (464)

DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Victor S. Moore., a citizen of the United States, residing in Lake City, Florida, hereby declare and state as follows:

1. I was employed by International Business Machines Corporation (IBM) of Armonk, New York at the time the above-identified application was conceived. I make this declaration in support the above-identified application.
2. IBM has invested substantial time and effort into the research, development, and marketing of their products, and in an effort to protect its rights in all new inventions, IBM requests that all employees prepare and submit confidential Invention Disclosure Forms upon conception by the inventor(s).
3. As a named co-inventor for this invention, I and my co-inventors prepared and submitted the attached Invention Disclosure No. BOC8-2003-0050 (hereinafter "Invention Disclosure") pursuant to IBM guidelines.
4. The Invention Disclosure was originally submitted for consideration to an IBM Attorney/Patent Professional for preparation of a patent application on March 17, 2003, and was insubstantially modified on March 26, 2003. The content of the Invention Disclosure has not been subsequently modified. The Invention Disclosure represents a fully conceived and workable invention as written. I reviewed the claims of the above-mentioned patent application prior to submission of the application to assure the claimed invention was fully supported by the

Invention Disclosure in light of the Invention Disclosure and art known at the time of the disclosure.

5. I diligently worked with outside counsel to prepare and file the above-mentioned patent application.

6. I make this Declaration to establish that my co-inventors and I conceived of the present invention at least as early as March 17, 2003, and exercised due diligence from that date to the date of filing for the above-identified patent application.

7. I further declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the above-identified patent application or any patent issuing thereon.


Thomas E. Creamer

Date: 1-14-2008

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/736,137 Confirmation No. : 3692
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NEIL KATZ

Date: 2/11/2008

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant : Thomas E. Creamer
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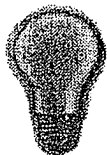
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7. I further declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the above-identified patent application or any patent issuing thereon.

VICTOR S. MOORE

Date: _____



Disclosure BOC8-2003-0050

Prepared for and/or by an IBM Attorney - IBM Confidential

Created By Vic Moore On 03/17/2003 08:13:14 AM MST

Last Modified By Neil Katz On 03/26/2003 10:22:14 AM EST

Required fields are marked with the asterisk (*) and must be filled in to complete the form .

*Title of disclosure (in English)

Using a Cellular control channel to roam between 802.11 networks

Summary

Status	Under Evaluation
Final Deadline	
Final Deadline Reason	
*Processing Location	Boca Raton
*Functional Area	select (SW/C) SW/C Solutions and Integration (from primary)
Attorney/Patent Professional	Richard Tomlin/Boca Raton/IBM
IDT Team	select Elaine Venturelli/Boca Raton/IBM
Submitted Date	03/25/2003 02:40:08 PM MST
*Owning Division	select SWSD
Incentive Program	
Lab	
*Technology Code	720
RWT Score	

Inventors with a Blue Pages entry

Inventors: Vic Moore/Boca Raton/IBM, Neil Katz/Fort Lauderdale/IBM@IBMUS, Tom Creamer/Fort Lauderdale/IBM@IBMUS

Inventor Name	Inventor Serial	Inventor Div/Dept	Inventor Phone	Manager Name
Moore, Victor S.	365724	70/HFN	975-2786	Bemis, Colin
Katz, Neil	15085	24/H0A	975-2726	McConnell, Lawrence (Larry)
Creamer, Thomas E.	356849	01/EECA	975-2789	Winters, Scott

> denotes primary contact

Inventors without a Blue Pages entry

IDT Selection

Attorney/Patent Professional	Richard Tomlin/Boca Raton/IBM
IDT Team	Elaine Venturelli/Boca Raton/IBM
Response Due to IP&L	04/26/2003

***Main Idea**

1. Background: What is the problem solved by your invention? Describe known solutions to this problem (if any). What are the drawbacks of such known solutions, or why is an additional solution required? Cite any relevant technical documents or references.

Wireless networks (802.11) are popping up everywhere. They are in airports, coffee shops, homes, hotels and many other places. These networks provide wide-band Internet connectivity and are viewed as a threat by wireless providers, such as cellular operator's. For the moment this threat is minimal because 802.11 networks are not yet connected together. For example, users can't seamlessly roam between networks like they do with cellular networks. Equally limiting is the lack of common billing and administration (registration, authentication, etc.). Users want a common experience, support and billing as they roam.

This disclosure teaches how to join the roaming, billing and management advantages offered by cellular providers with the low cost wireless wide bandwidth provided by 802.11 networks. In doing so, the threat posed by these 802.11 networks to cellular companies is mitigated because the cellular companies benefit from the bandwidth offered by the 802.11 networks. In addition these cellular companies offer services to users in the 802.11 networks.

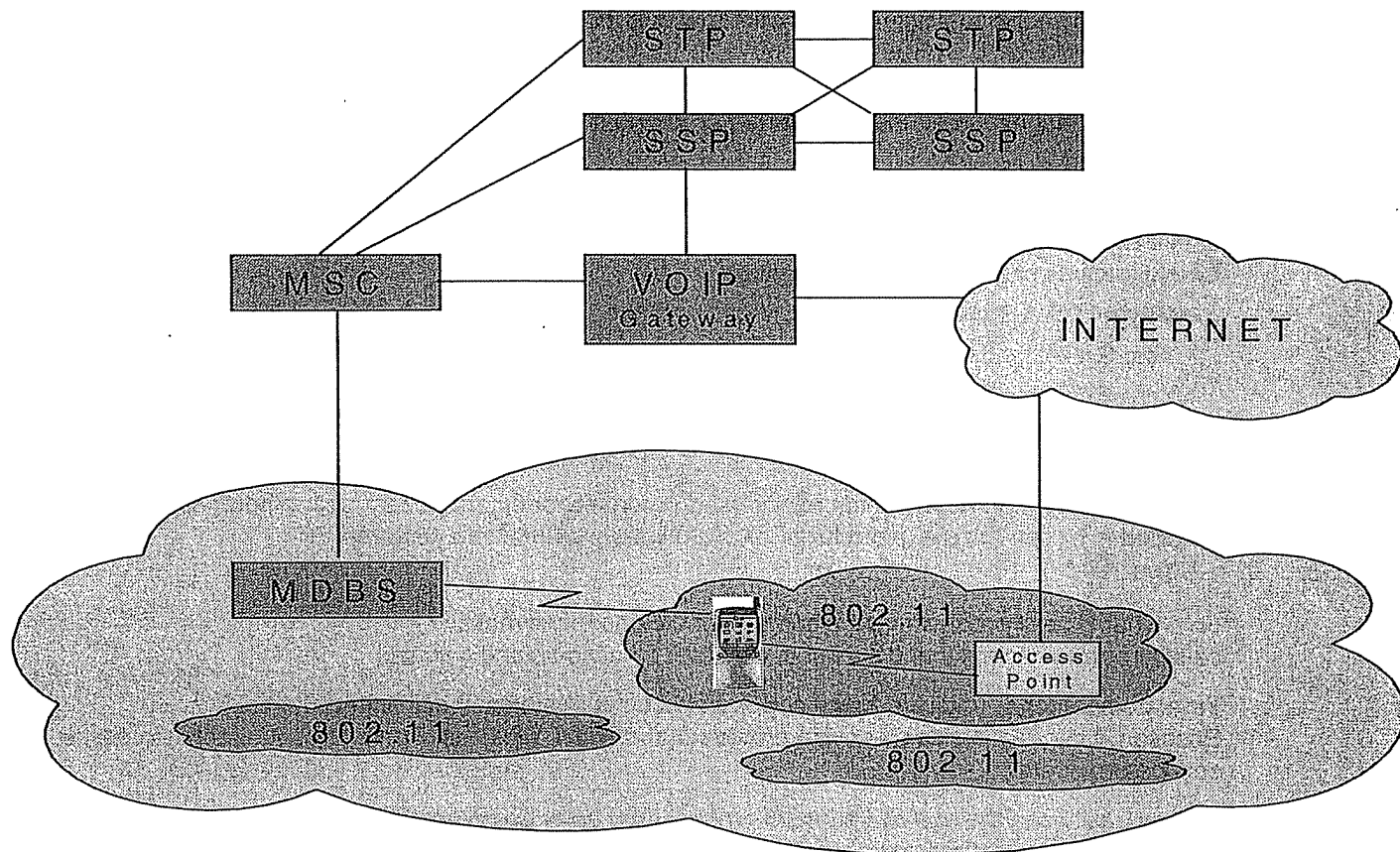
2. Summary of Invention: Briefly describe the core idea of your invention (saving the details for questions #3 below). Describe the advantage(s) of using your invention instead of the known solutions described above.

This invention brings cellular and 802.11 networks together into a unified solution by using the cellular control channel to communicate the IP address of an 802.11 radio embedded within a cellular phone. This IP address tells the cellular network to route voice data to the respective cellular phone via a VOIP gateway attached to the Internet. This relieves the cellular network from the burden of delivering voice data over its own voice channels. The 802.11 networks benefit from the authentication and billing built into the cellular system.

3. Description: Describe how your invention works, and how it could be implemented, using text, diagrams and flow charts as appropriate.

This invention employs a cellular phone with an embedded 802.11 radio. When this radio detects the presence of an 802.11 network it queries the network for an IP address. Next the phone uses the cellular networks control channel to send a message to the MSC (see Figure 1). This message includes the assigned IP address from the 802.11 network and it instructs the MSC to route all voice traffic for the associated cellular phone to an attached VOIP gateway (see Figure-1). This gateway routes the voice data for the respective cellular phone to the associated 802.11 network. The 802.11 radio within the cellular phone receives this data and passes it to the cellular phones voice logic as if the data had come directly from the MDBS.

Figure 1



When the cellular phone roams outside the range of the associated 802.11 network, or when it comes in contact with a stronger signal from a neighboring network, the phone switches to the new 802.11 network by sending a message via the cellular phones control channel to tell the VOIP gateway to send future voice traffic to the IP address assigned by the new 802.11 network. Further, if the phone roams outside the range of the 802.11 network, and no other network is detected, then the phone sends a message to the MSC telling it to now use the standard cellular voice channels rather than the VOIP gateway.

Observe that this invention does not require "mobile IP addressing". This characteristic improves the scalability of the solution by eliminating the potential bottle neck at the mobile IP server.

This invention is important because it allows cellular companies to offer the wide-band services promised by "Third Generation Networks" without building new infrastructure. This solution thus significantly lowers the cost to enter into the 3rd generation services business.

~~Patent Value Tool~~

~~1. Select the single most appropriate technology category for your invention from the following technology list.~~

Exhibit A



Tom Creamer

09/25/2003 02:18 PM

This document expires on
12/24/2003

To: Richard Tomlin/Boca Raton/IBM
cc: Elaine Venturelli/Boca Raton/IBM@IBMUS, Neil Katz/Fort
Lauderdale/IBM@IBMUS, Vic Moore/Fort Lauderdale/IBM@IBMUS
From: Tom Creamer/Fort Lauderdale/IBM@IBMUS
Subject: Search Results Analysis: Disclosure BOC8-2003-0050

Dick, here are my findings:

US 6411632B2: Not Applicable. This patent discloses an interconnection scheme for cellular (wireless) systems based on the TCP/IP protocol. BOC8-2003-0120 discloses a means of interconnecting cellular voice services across multiple wireless (802.11, for example) using the subscriber's cellular network infrastructure as an interconnection hub.

US 6289214B1: Not Applicable. This patent discloses an interconnection scheme for cellular (wireless) systems based on the TCP/IP protocol for SMS (short message service). BOC8-2003-0120 discloses a means of interconnecting cellular voice (not data, or messaging) services across multiple wireless (802.11, for example) using the subscriber's cellular network infrastructure as an interconnection hub.

end of note

Thomas E. Creamer, STSM
PvC Software Technical Sales
IBM Sales & Distribution - Americas
8051 Congress Avenue, Boca Raton, FL 33487
Voice: 1-561-862-2739, Fax: 1-561-862-3323 (t/l 975)
Mobile: 1-561-654-8233
internet: creamer@us.ibm.com

"Git-R-Done" ... valuable insight from Larry The Cable Guy

Exhibit B



Rec'd 9/26/03
via hand delivery

8051 Congress Avenue
Boca Raton, FL 33487

September 25, 2003

60169-4164

12/15/03

Akerman, Senterfitt
222 Lakeview Avenue
4th Floor
West Palm Beach, FL 33401

REF: Invention Disclosure: BOC8-2003-0050
Title: Using a Cellular control channel to roam between 802.11 networks
IBM Docket: BOC9-2003-0093

Dear Kevin,

Please prepare and file the above referenced case with the U.S. Patent and Trademark Office. A copy of the invention disclosure, patentability search results and inventor comments are enclosed for your use in preparation of the application in accordance with IBM's format.

Although a bar date does not apply to this docket, please file the application prior to December 15, 2003 to meet our year-end filings for the Tempelmeyer organization.

Sincerely,

A handwritten signature in cursive script, reading "Richard A. Tomlin", is located below the "Sincerely," text.

Richard A. Tomlin
Intellectual Property Law Department
(561)862-2732

Enclosures

Exhibit C



Boca Raton
Fort Lauderdale
Jacksonville
Miami
Orlando
Tallahassee
Tampa
West Palm Beach

222 Lakeview Avenue
4th Floor
West Palm Beach, Florida 33401-6147
Post Office Box 3188 *mail*
West Palm Beach, Florida 33402-3188
www.akerman.com
561 653 5000 *tel* 561 659 6313 *fax*

Direct Dial: 561-671-3658
E-Mail: kcuenot@akerman.com

October 2, 2003

Richard A. Tomlin, Esquire
IBM Corporation
8051 Congress Avenue
IMAD 4041
Boca Raton, FL 33487

RE: New U.S. Patent Application
USING A CELLULAR CONTROL CHANNEL TO ROAM BETWEEN
802.11 NETWORKS
IBM Docket No. BOC9-2003-0093; Our Reference No.: 6169-464

Dear Dick:

Thank you for your letter dated September 25, 2003. In accordance with IBM standard protocol, a patent application will be prepared and filed in the above-referenced matter on or before December 15, 2003. Notwithstanding, we will strive to prepare the patent application in an expedient manner.

As always, thank you for allowing us to be of assistance to you.

Very truly yours,

AKERMAN SENTERFITT

Kevin T. Cuenot

KTC/vb

Exhibit D

Alaine Allison - Draft Patent Application (BOC9-2003-0093; 6169-464)

From: Kevin T. Cuenot
To: Creamer, Tom; Katz, Neil A.; Moore, Vic
Date: 11/29/2003 4:56 PM
Subject: Draft Patent Application (BOC9-2003-0093; 6169-464)
CC: Allison, Alaine; esquim@us.ibm.com; Venturelli, Elaine

RE: Draft Patent Application for USING A MOBILE CONTROL CHANNEL TO ROAM BETWEEN NETWORKS
IBM Docket No. BOC9-2003-0093; Our Reference No. 6169-464

Dear Inventors:

Attached please find a draft of a patent application and associated drawings for your review in the above-identified matter. Please review the application carefully to ensure that the description of the invention accurately recites all of the invention's characteristics in the broadest possible manner, while also explaining, in detail, the preferred embodiment of the invention. The drawings should also be reviewed to confirm that they accurately depict the various details of the invention as you and your co-inventors understand them.

Importantly, please ensure that each inventor named on the cover sheet of the patent application has contributed to the conception of your invention as described in at least one of these claims. If, for some reason we have neglected to list an inventor who has contributed to the conception of subject matter described in a claim, please so advise us immediately.

Once you have reviewed the draft application, please forward your comments and/or any suggestions you may have.

Please keep in mind that we have been asked by the IP Law Department to file the referenced patent application in the U.S. Patent and Trademark Office on or December 15, 2003, and as such, would appreciate your prompt attention to this request.

Very truly yours,

AKERMAN SENTERFITT

Kevin T. Cuenot
Akerman Senterfitt
222 Lakeview Avenue, Suite 400
West Palm Beach, FL 33401
(561) 671-3658 (Phone)
(561) 659-6313 (Fax)
E-Mail: kcuenot@akerman.com

Exhibit E

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----->
|      | "Kevin T. Cuenot"|
|      | <KCuenot@Akerman.|
|      | com>              |
|      |                  |
|      | 11/29/2003 04:56 |
|      | PM               |
|      |                  |
|      | ----->
```

Exhibit F

Alaine Allison - IBM Docket BOC9-2003-0093 / Our Docket 6169-464

From: Alaine Allison
To: creamer@us.ibm.com; nkatz@us.ibm.com; vmoore@us.ibm.com
Date: 12/1/2003 2:53 PM
Subject: IBM Docket BOC9-2003-0093 / Our Docket 6169-464
CC: Cuenot, Kevin T.; Esquivel, Melanie; eventure@us.ibm.com

RE: Final Draft Patent Application for
USING A MOBILE CONTROL CHANNEL TO ROAM BETWEEN NETWORKS
IBM Docket No. BOC9-2003-0093; Our Docket No. 6169-464

Dear Inventors:

Enclosed please find for execution a final draft of the above-identified patent application, a REDLINED patent which reflects the requested revisions, the Drawings, the Declaration and Power of Attorney, the Assignment, and the Oath and Assignment for the Republic of China.

After your review of the redlined application, if the patent application accurately recites all of the invention's characteristics, by copy of this e-mail to Melanie Esquivel, please print out the formal documents, have each Inventor sign and date where indicated, then please forward by facsimile transmission to our attention at fax number 561-659-6313.

Thank you for your prompt attention to this matter.

Please feel free to contact Mr. Cuenot or myself should you have any questions or comments.

Very truly yours,

AKERMAN SENTERFITT

Kevin T. Cuenot, Esquire*
222 Lakeview Avenue, Suite 400
West Palm Beach, FL 33402-3188
Voice: (561) 671-3658
Fax: (561) 659-6313
E-mail: kcuenot@akerman.com
Web: www.akerman.com
*Licensed to practice before the
United States Patent and Trademark Office

Sent on Mr. Cuenot's behalf to avoid delay

Alaine Allison
Secretary to Kevin T. Cuenot, Esquire
and Brian K. Buchheit, Esquire
AKERMAN SENTERFITT
222 Lakeview Avenue, Suite 400
West Palm Beach, FL 33402
PH: 561-653-5000
FAX: 561-659-6313
E-Mail: aallison@akerman.com

Exhibit G

Docket No.: BOC9-2003-0093 (464)

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

USING A MOBILE CONTROL CHANNEL TO ROAM BETWEEN NETWORKS

the specification of which is attached hereto and identified by the Attorney Docket Number appearing above.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

<u>Number</u>	<u>Country</u>	<u>Day/Month/Year</u>	<u>Priority Claimed</u>
---------------	----------------	-----------------------	-------------------------

I hereby claim the benefit (a) under Title 35, United States Code, § 119(e) of any U.S. application listed below and identified as a provisional application, or (b) under Title 35, United States Code, § 120 of any U.S. application listed below and not identified as a provisional application, and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior U.S. application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information material to the patentability of this application as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT International filing date of this application.

Prior U.S. Application(s)

<u>Serial Number</u>	<u>Filing Date</u>	<u>Status</u>
----------------------	--------------------	---------------

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


Docket No.: BOC9-2003-0093 (464)

As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

J. Rodman Steele, Jr.	Reg. No. 25,931	Theodore M. Green	Reg. No. 41,801
Gregory A. Nelson	Reg. No. 30,577	Michael K. Dixon	Reg. No. 46,665
Joseph W. Bain	Reg. No. 34,290	Sarah E. Smith	Reg. No. 50,488
Stanley Kim	Reg. No. 42,730	Amy A. Ostrom	Reg. No. 52,088
Mark D. Passler	Reg. No. 40,764	Brian K. Buchheit	Reg. No. 52,667
Kevin T. Cuenot	Reg. No. 46,283	Margaret J. McLaren	Reg. No. 53,303
Neil R. Jetter	Reg. No. 46,803	Peter A. Chiabotti	Reg. No. 54,603
Pablo Meles	Reg. No. 33,739	Richard A. Tomlin	Reg. No. 24,449

Send correspondence to Gregory A. Nelson, Akerman Senterfitt, 222 Lakeview Avenue, Fourth Floor, P.O. Box 3188, West Palm Beach, Florida 33402-3188 and direct all telephone calls to Gregory A. Nelson at (561) 653-5000.

First Inventor:	Thomas E. CREAMER
------------------------	-------------------

Signature: 

12/15/2003

Residence: Boca Raton, FL

Date

Citizenship: United States

Post Office Address: 12877 Hyland Circle, Boca Raton, FL 33428

Address:

Second Inventor:	Neil A. KATZ
-------------------------	--------------

Signature: 

12/18/2003

Residence: Parkland, FL

Date

Citizenship: United States

Post Office Address: 7500 E. Cypresshead Drive, Parkland, FL 33067

Address:

Third Inventor:	Victor S. Moore
------------------------	-----------------

Signature: 

12/18/03

Residence: Boynton Beach, FL

Date

Citizenship: United States

Post Office Address: 4739 Pinetree Drive, Boynton Beach, FL 33436

Address: